AMENDMENTS TO THE CLAIMS

Listing of Claims

A listing of the entire set of pending claims is submitted herewith per 37 CFR 1.121. This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (currently amended) A method of generating ~~in particular~~ EUV radiation ~~(12)~~ and/or soft X-ray radiation ~~(12a)~~ emitted by a plasma ~~(26)~~ formed by an operating gas ~~(22)~~ in a discharge space ~~(14),~~ ~~which space (14) comprises~~ comprising at least a radiation emission window ~~(16)~~ and an electrode system with at least one anode ~~(18)~~ and at least one cathode ~~(20)~~, ~~which~~ the system transmitting ~~transmits~~ electrical energy into the plasma ~~(26)~~ by means of charge carriers ~~(24)~~ introduced into the discharge space ~~(14)~~, ~~characterized in that~~ wherein at least one radiation ~~(30)~~ generated by at least one radiation source ~~(28)~~ is introduced into the discharge space ~~(14)~~ for ~~making available~~ providing the ~~discharge~~ charge carriers ~~(24)~~.

2. (currently amended) A method as claimed in claim 1, ~~characterized in that~~ wherein the radiation source ~~(28)~~ generates coherent or incoherent radiation ~~(30)~~ of high energy density, such that the charge carriers ~~(24)~~ are released into the discharge space ~~(14)~~ owing to the incidence of the radiation ~~(30)~~ on the electrode system.

3. (currently amended) A method as claimed in claim 1, ~~characterized in that~~ wherein the radiation source ~~(28)~~ generates mass radiation ~~(30) which consists of~~ comprising at least one electron and/or one ion.

4. (currently amended) A method as claimed in claim 1, ~~characterized in that~~ wherein the radiation source ~~(28)~~ puts in pulsed radiation ~~(30)~~ with a first radiation path ~~(32)~~ and/or at least one second radiation path ~~(34)~~ simultaneously or mutually shifted in time into the discharge space ~~(14)~~.

5. (currently amended) A method as claimed in claim 1, ~~characterized in that~~ wherein the

electrode system comprises at least one auxiliary electrode ~~(36)~~ to which an additional potential is applied or which ~~makes available~~ provides the charge carriers ~~(24)~~ or an operating gas ~~(22)~~ by acting as a sacrificial electrode.

6. (currently amended) A method as claimed in claim 1, ~~characterized in that~~ wherein the radiation ~~(30)~~ is focused on at least one electrode ~~(18, 20, 36)~~ of the electrode system.

7. (currently amended) A method as claimed in claim 1, ~~characterized in that~~ wherein the radiation ~~(30)~~ is incident on an electrode ~~(18, 20, 36) that substantially consists of~~ comprising a material selected from the group consisting of: tungsten, molybdenum, iron, copper, tin, graphite, indium, antimony, tellurium, iodine, ~~an alloy or a chemical compound thereof, or~~ and steel.

8. (currently amended) A method as claimed in claim 1, ~~characterized in that~~ wherein the radiation ~~(30)~~ is guided onto the electrode ~~(18, 20, 36)~~ in a pattern having a point, circular, annular, or linear shape, and/or a combination thereof.

9. (currently amended) A method as claimed in claim 1, ~~characterized in that~~ wherein the radiation ~~(30)~~ is introduced into at least one cavity of the ~~affected~~ electrode ~~(18, 20, 36)~~, which cavity is open towards the discharge space ~~(14)~~ and is bounded by electrode material at least three sides.

10. (currently amended) A method as claimed in claim 1, ~~characterized in that~~ wherein the operating gas ~~(22)~~ is introduced into the discharge space ~~(14)~~ by means of a feed duct ~~(48)~~ or an auxiliary ray ~~(50)~~ focused on the electrode ~~(18, 20, 36)~~.

11. (currently amended) A method as claimed in claim 1, ~~characterized in that~~ wherein the radiation ~~(30)~~ is introduced into the discharge space ~~(14)~~ via the radiation emission window ~~(16)~~ or via an aperture ~~(52)~~.

12. (currently amended) A method as claimed in claim 1, ~~characterized in that~~ wherein the radiation ~~(30)~~ has a wavelength in the UV, IR, and/or visible range.

13. (currently amended) A method as claimed in claim 1, ~~characterized in that~~ wherein the radiation ~~(30)~~ is incident on the surface of the electrode ~~(18, 20, 36)~~ at an angle (a) of 0° to 90°.

14. (currently amended) A method as claimed in claim 1, ~~characterized in that~~ wherein a time interval (Δt) is set between the introduction of the radiation ~~(30)~~ and the transmission of the electrical energy, or between the introduction of a or the auxiliary ray ~~(50)~~ and the radiation ~~(30)~~.

15. (currently amended) A device ~~(10)~~ for generating ~~in particular~~ EUV radiation ~~(12)~~ and/or soft X-ray radiation ~~(12a)~~, ~~which~~ the device ~~(10) emits~~ emitting a plasma ~~(26)~~ formed in an operating gas ~~(22)~~ in a discharge space ~~(14), which space (14) comprises~~ comprising at least one radiation emission window ~~(16)~~ and an electrode system with at least one anode ~~(18)~~ and at least one cathode ~~(20)~~, wherein electrical energy ~~can be~~ is transmitted to the plasma ~~(26)~~ by means of charge carriers ~~(24) that can be~~ being introduced into the discharge space ~~(14)~~, ~~characterized in that~~ wherein at least one radiation source ~~(28)~~, which introduces at least one radiation ~~(30)~~ into the discharge space ~~(14)~~, is present for providing the charge carriers ~~(24)~~.

16. (currently amended) A device ~~(10)~~ as claimed in claim 15, ~~characterized in that~~ wherein the radiation source ~~(28)~~ generates coherent or incoherent radiation ~~(30)~~ of high energy density, whereby the charge carriers ~~(24) can be~~ are released into the discharge space ~~(14)~~ through incidence of the radiation ~~(30~~) on the electrode system.

17. (currently amended) A device ~~(10)~~ as claimed in claim 15, ~~characterized in that~~ wherein the radiation source ~~(28)~~ generates radiation ~~(30)~~ to be afflicted with mass which comprises at least

one electron and/or one ion.

18. (currently amended) A device ~~(10)~~ as claimed in claim 15, ~~characterized in that~~ wherein the radiation source ~~(28)~~ provides pulsed radiation ~~(30)~~ with a first radiation path ~~(32)~~ and/or at least one second radiation path ~~(34)~~, either simultaneously or mutually shifted in time.

19. (currently amended) A device ~~(10)~~ as claimed in claim 15, ~~characterized in that~~ wherein the electrode system comprises at least one auxiliary electrode ~~(36)~~.

20. (currently amended) A device ~~(10)~~ as claimed in claim 15, ~~characterized in that~~ wherein the radiation ~~(30)~~ is focused on at least one electrode ~~(18, 20, 36)~~ of the electrode system.

21. (currently amended) A device ~~(10)~~ as claimed in claim 20, ~~characterized in that~~ wherein at least the electrode ~~(18, 20, 36)~~ affected by the radiation ~~(30) is substantially manufactured from~~ comprises a material selected from the group consisting of: tungsten, molybdenum, iron, copper, tin, graphite, indium, tellurium, iodine, ~~an alloy or chemical compound thereof, or~~ and steel.

22. (currently amended) A device (10) as claimed in claim 15, ~~characterized in that~~ wherein the radiation ~~(30)~~ is incident on the electrode ~~(18, 20, 36)~~ in a point, circular, annular, or linear pattern and/or a combination thereof.

23. (currently amended) A device ~~(10)~~ as claimed in claim 15, ~~characterized in that~~ wherein the electrode ~~(18, 20, 36)~~ affected by the radiation ~~(30)~~ comprises at least one cavity that is open towards the discharge space ~~(14)~~ and that is bounded by electrode material at least three sides.

24. (currently amended) A device ~~(10)~~ as claimed in claim 23, ~~characterized in that~~ wherein the cavity is a blind hole ~~(38)~~, a groove ~~(40)~~, or a hollow space ~~(42)~~ of constant or variable diameter,

which comprises a depression ~~(44)~~ or an undercut ~~(46), as desired~~.

25. (currently amended) A device ~~(10)~~ as claimed in claim 15, ~~characterized in that~~ wherein the operating gas ~~(22) can be~~ is introduced into the discharge space ~~(14)~~ by means of a feed duct ~~(48)~~ or by means of an auxiliary ray ~~(50)~~ focused at least on one electrode ~~(18, 20, 36)~~.

26. (currently amended) A device ~~(10)~~ as claimed in claim 15, ~~characterized in that~~ wherein the radiation ~~(30) can be~~ is introduced into the discharge space ~~(14)~~ via an aperture ~~(52)~~.

27. (currently amended) A device ~~(10)~~ as claimed in claim 15, ~~characterized in that~~ wherein the radiation ~~(30)~~ has a wavelength in the V, IR, and/or visible range.

28. (currently amended) A device ~~(10)~~ as claimed in claim 15, ~~characterized in that~~ wherein the radiation ~~(30)~~ is incident on the electrode ~~(18, 20, 36)~~ at an angle (α) of 0° to 90° to the surface thereof.

29. (currently amended) A device ~~(10)~~ as claimed in claim 15, ~~characterized in that~~ wherein the radiation ~~(30) can be~~ is introduced into a symmetrical or asymmetrical discharge space ~~(14)~~.

30. (currently amended) A device ~~(10)~~ as claimed in claim 15, ~~characterized in that~~ wherein a time delay (Δt) ~~can be~~ is set between the introduction of the radiation ~~(30)~~ and the transmission of the electrical energy, or between the introduction of a or the auxiliary ray ~~(50)~~ and the radiation ~~(30)~~.